

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference PF020062		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. PCT/EP 03/50200	International filing date (day/month/year) 27.05.2003	Priority date (day/month/year) 07.06.2002	
International Patent Classification (IPC) or both national classification and IPC H04N3/15			
Applicant THOMSON LICENSING S.A. ET AL.			

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
 - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

- This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 05.12.2003	Date of completion of this report 06.07.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Bequet, T Telephone No. +31 70 340-3339 

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International application No. **PCT/EP 03/50200**

I. Basis of the report

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-12 as originally filed

Claims, Numbers

1-20 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-13,15,17-20
	No: Claims	14,16
Inventive step (IS)	Yes: Claims	
	No: Claims	1-13,15,17-20
Industrial applicability (IA)	Yes: Claims	1-20
	No: Claims	

2. Citations and explanations

see separate sheet

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Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1) Reference is made to the following documents:

D1: CENTEN ET AL.: "A multiformat HDTV Camera Head"
SMPTE JOURNAL August 2001
Pages 510-516
D2: WO-A-92/20187

2) The solution proposed in claims 1,2, 3-13,20 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons.

2.1) D1 is considered as the closest prior art and discloses a solid-state sensor of the type defined in claim 1 and in the additional feature of claim 2 ($1440 \times 3 = 4320$).

It also discloses means for grouping successive lines in order to adapt said number of lines to a required format. In the present case the 6 lines merging is defined in Table 2 and a 3x6 lines merging defines the NTSC (it is considered that a 480 lines format implicitly defines the NTSC). As a consequence D1 discloses at least the (6.n) lines merging.

The additional feature of claim 1 relative to D1 relates to the (5.n) merging. The problem to be solved is to add an additional format to the sensor defined in D1. The question is; would the skilled person consider using D1 and how ?

There is a clear indication in D1 (p511, right column, lines 17-21) that he would consider D1 for adding a format " ... how can one realise all scanning formats ...".

D1 already considers a plurality of formats including the NTSC, but it does not consider the PAL/SECAM, nevertheless as above mentioned the skilled person would consider D1 for PAL/SECAM if needed. The skilled person is also aware of the number of lines for this additional format and that this number is **not necessary a fixed number** (see D2, page 5, lines 29-32) "...employs approximately 575 active lines ...".

When using the same method (nothing suggests in D1 that an other method can be used e.g. skipping lines) of grouping lines and dividing 4320 by (5.3) he would arrive at 288 lines (576 lines), as nothing suggests in D1 that it is possible to use a merging different from an integer number (and in any case the skilled person would not consider the use of a 55200 lines sensor), the skilled person would keep the 576 lines format as

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the SECAM format and arrive without any modification to the subject matter of claim 1.

(in addition the skilled person would perhaps not base the number lines of the SECAM format on the observation that the ratio of 480 to 576 is exactly 5 to 6 but when merging the lines in the sensor defined in D1 he would arrive exactly to the same result as the one defined in claim 1).

2.2) The same objection applies to independent claims 15 and 17 (see also clarity objection §4). For claim 19 the same objection is raised at least for the first alternative (240 lines).

2.3) In the dependant claims 3-13, 20 structural details to the apparatus defined in the independent claims 1 or 19 are set out, all of which insofar as they are not explicitly disclosed in D1 relate to routine measures normally to be expected from the skilled person. Thus these claim lack an inventive step.

3) The present application does not meet the requirements of Art.33(2) because the subject matter of independent claims 14 and 16 is not new.

3.1) In these claims the merging of 6.n or 3.n is defined for the NTSC format, it has already been argued that the NTSC format is implicit in D1 and is obtained by a merging of 3.6 or 6.3 or 3.3 (see table 2). Claims 14 and 16 are therefore not new.

4) The following main clarity objections have also to be made:

a) In claim 19 it should be noted that the ratio of 241, 242, 242 to 288 is **not anymore** 5 to 6 and is therefore not a solution to the problem and the observation defined in the application (page 3, lines 21-23).

b) Claim 1 does not define the number of lines of the sensor, this number is essential because it is closely related to the solution to the observation made at page 3, lines 21-23.

c) The multi format aspect is not defined in claims 14-16, the merging of the lines is only a solution when imaging with a plurality of formats. For example a sensor specifically adapted to NTSC does not need to merge lines (except perhaps for sensitivity aspects, but it is not the subject of the application).

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d) The number of independent claims (6 in the present case) makes difficult to determine the matter for which protection is sought.